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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,286	08/17/2001	Steven B. McGowan	884.516US1	4742

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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH
1600 TCF TOWER
121 SOUTH EIGHT STREET
MINNEAPOLIS, MN 55402

EXAMINER

HASHEM, LISA

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/932,286	Applicant(s) MCGOWAN, STEVEN B.	
	Examiner Lisa Hashem	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 34-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 34-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed 'out-of-band transmitter' in claims 3 and 34 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4-6 and 37-40 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent No. 6,493,546 by Patsiokas.

Regarding claim 1, Patsiokas discloses a sound generation device comprising:

an audio source to generate an audio signal (Fig. 3: 50, 52) (col. 5, lines 15-18);

a radio frequency (RF) transmitter (Fig. 3, 64), coupled to the audio source (via a RF modulator), to transmit an RF carrier signal modulated with the audio signal, the RF carrier signal having a specific carrier frequency (col. 3, lines 54-66; col. 5, lines 15-18); and

a channel locator controller (Fig. 3, 16) to identify an optimum (e.g. favorable, available) carrier frequency (col. 4, line 4-col. 5, line 9), wherein the channel locator controller includes

a stored program digital computer (Fig. 3, 60), the computer to store a database of optimum carrier frequencies arranged by geoposition (e.g. geographic area) (col. 4, line 26 – col. 5, line 9); and

a geoposition source (Fig. 3, 58) coupled to the stored program digital computer to provide a geoposition (e.g. geographic area, metropolitan area) to the stored program digital computer (col. 4, line 46 - col. 6, line 18).

Regarding claim 2, the sound generation device recited in claim 1, wherein Patsiokas further discloses the geoposition source comprises a table or listing stored in one of a programmable read only memory (PROM) device or programmable scanning device (Fig. 7, 73), a cellular phone, a cellular switching center, and an Internet site (col. 5, lines 34-49).

Regarding claim 4, the sound generation device recited in claim 1, wherein Patsiokas further discloses the sound generation device further comprises one of a cellular phone or satellite communication device, a GPS (global position system) receiver, a geoposition programming device (Fig. 3, 58), a data entry device, and a programmable read only memory (col. 4, line 46 - col. 6, line 18).

Regarding claim 5, the sound generation device recited in claim 1, wherein Patsiokas further discloses the sound generation device further comprises:
a channel selection circuit (Fig. 3, 60 or Fig. 3, 66), coupled to the RF transmitter (via the RF modulator), to select an optimum carrier frequency on which to transmit the RF carrier signal (col. 4, line 61 – col. 5, line 9).

Regarding claim 6, the sound generation device recited in claim 1, wherein Patsiokas further discloses the sound generation device comprises equipment from a group comprising an MP3 (Motion Picture Experts Group, Audio Layer 3) player, a compact disk player (Fig. 3, 52), a mini-disk player, a micro-disk player, a digital video disk player, a cassette tape player (Fig. 3, 52), a radio, a cellular phone, a handheld computer, a portable computer, a television, a video player, a personal digital assistant, an electronic musical instrument, an electronic toy, and a wireless microphone (col. 4, lines 32-35).

Regarding claims 37-40, please see the rejections to claims 1 and 4-6 above, to reject the sound generation device in claims 37-40.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patsiokas in view of U.S. Patent Application Publication No. 2001/0049262 by Lehtonen.

Regarding claim 3, the sound generation device recited in claim 1, wherein Patsiokas further discloses the channel locator controller further comprises:
to transmit a channel selection signal comprising an optimum carrier frequency or an out-of-band frequency (col. 3, line 54 – col. 4, line 3).

Patsiokas discloses that the sound generation device can communicate with other types of receivers using wireless links at radio frequencies other than the AM and FM bands (e.g. out-of-band frequencies). However, Patsiokas does not disclose an out-of-band transmitter.

Lehtonen discloses a sound generation device (Fig. 3) comprising:
an audio source to generate an audio signal (Fig. 3, 27: MP3 Player) (section 0030, line 1 – section 0031, line 6);
a radio frequency (RF) transmitter (Fig. 3, 22: RF, AER), wirelessly coupled to the audio source, to transmit an RF carrier signal modulated with an audio signal, the RF carrier signal having a specific carrier frequency (section 0035, lines 1-14); and

a channel locator controller (Fig. 3: BT2) to identify an optimum carrier frequency (e.g. 2.4 GHz), wherein the channel locator controller includes an out-of-band transmitter (Fig. 3: BT2, ANT2) to transmit a channel selection signal comprising an optimum carrier frequency (section 0032, lines 1-6).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the sound generation device of Patsiokas to include an out-of-band transmitter as taught by Lehtonen. One of ordinary skill in the art would have been lead to make such a modification to provide an additional transmitter that can communicate with receivers using wireless links at radio frequencies other than the AM and FM bands.

6. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patsiokas in view of U.S. Patent Application Publication No. 2001/0049262 by Lehtonen.

Regarding claim 34, Patsiokas discloses a sound generation device comprising:
an audio source to generate an audio signal (Fig. 3: 50, 52) (col. 5, lines 15-18);
a radio frequency (RF) transmitter (Fig. 3, 64), coupled to the audio source (via a RF modulator), to transmit an RF carrier signal modulated with the audio signal, the RF carrier signal having a specific carrier frequency (col. 3, lines 54-66; col. 5, lines 15-18);
a channel locator controller (Fig. 3, 16) to identify an available (e.g. at hand, optimum) carrier frequency (col. 4, line 4-col. 5, line 9), wherein the channel locator controller includes an RF receiver (Fig. 3, 50), coupled to the RF transmitter (via Fig. 3: 54, 56), to receive signals having different carrier frequencies (col. 4, lines 26-32 and lines 35-45); and
a channel locator circuit (Fig. 3, 60), coupled to the RF receiver (via Fig 3: 54, 56), to identify a carrier frequency below a minimum signal strength (col. 4, lines 46-57; col. 5, lines 34-62); and

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to transmit a channel selection signal comprising an available carrier frequency (e.g. out-of-band frequency) (col. 3, line 54 – col. 4, line 3).

Patsiokas discloses that the sound generation device can communicate with other types of receivers using wireless links at radio frequencies other than the AM and FM bands (e.g. out-of-band frequencies). However, Patsiokas does not disclose an out-of-band transmitter.

Lehtonen discloses a sound generation device (Fig. 3) comprising:
an audio source to generate an audio signal (Fig. 3, 27: MP3 Player) (section 0030, line 1 – section 0031, line 6);
a radio frequency (RF) transmitter (Fig. 3, 22: RF, AER), wirelessly coupled to the audio source, to transmit an RF carrier signal modulated with an audio signal, the RF carrier signal having a specific carrier frequency (section 0035, lines 1-14); and
a channel locator controller (Fig. 3: BT2) to identify an optimum carrier frequency (e.g. 2.4 GHz), wherein the channel locator controller includes
an out-of-band transmitter (Fig. 3: BT2, ANT2) to transmit a channel selection signal comprising an optimum carrier frequency (section 0032, lines 1-6).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the sound generation device of Patsiokas to include an out-of-band transmitter as taught by Lehtonen. One of ordinary skill in the art would have been lead to make such a modification to provide an additional transmitter that can communicate with receivers using wireless links at radio frequencies other than the AM and FM bands.

Regarding claims 35 and 36, please see the rejections of the sound generation device in claims 5 and 6 mentioned above, to reject the sound generation device in claims 35 and 36.

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Response to Arguments

7. Applicant's arguments with respect to claims 1-6 and 34-40 have been considered but are moot in view of the new ground(s) of rejection.
8. Accordingly, this action is **NON-FINAL**.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- U.S. Patent No. 6,937,732 by Ohmura et al discloses a sound generation device comprising an out-of-band transmitter and an audio source
- U.S. Patent No. 6,829,475 by Lee et al discloses a sound generation device comprising a GPS receiver which allows for channel updating by location, traffic information, geographic advertising, and available seminar content

10. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

Or call:

(571) 272-2600 (for customer service assistance)

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (571) 272-7542. The examiner can normally be reached on M-F 8:30-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LH

lh

March 21, 2006


FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600